Murphy Environmental Hollywood Ltd.
Annual Environmental Report 2008
EPA Licence W0129-02

i Manager's Statement

Murphy Environmental Gormanston Facility Manager

Emma Murphy

Thank you for having a read of Murphy Environmental's sixth Annual Environmental Report.

Writing this piece forces me to take a look back at 2008 and put it in context of our last six years of operation. Like almost every other business in the country, we have felt the effects of the economic downturn. Perhaps we had advance warning that it was on its way in 2007 – working very much 'at the coalface' with the construction sector, it was obvious that things were slowing down.

We've had to steer the business accordingly and we are confident for its future. We remain committed to maintaining our excellent operational and environmental track record.

Our site restoration works progressed steadily during 2008. In addition, Murphy Concrete Manufacturing Ltd. is now in ownership of a quarry adjacent to the licensed Gormanston site, for which we have submitted a planning application for site restoration proposals. Our goal is to review our Waste Licence boundary during 2009 to include this area also.

As a waste operator, Murphy Environmental has an important role to play in ensuring that the protection and improvement of our local environment remains core to our business development and we look forward to guiding the company through these more challenging times.

Murphy Environmental Hollywood Ltd. Facility Manager

Ken Rooney

Murphy Environmental Hollywood Ltd. continued to consolidate its place in the waste market last year. As you will see, our incoming tonnages were down significantly for the year; however as a company we used this 'down time' to address a number of business issues, not least establishing the site as a separate and independent arm of the Murphy group of companies.

Murphy Environmental Hollywood Ltd. is now a well-known and very well respected facility, especially for niche waste management requirements, like low-level contaminated soils from development sites, and a range of specialist inert wastes from the industrial and municipal sector. As a company, we've worked very hard at positioning ourselves as a market leader since we opened the site in 2002 and our customers and regulators have come to recognise us as transparent, cooperative and progressive operators.

For us, a key requirement of the AER is to highlight the progress made in restoring the site year-on-year. Whilst we are busy managing the business and the environment, we have to keep focused on that overall goal. Working or visiting the Hollywood site, you can't but be aware of the environment around you, with stunning views – on a clear day – of the local countryside, as far as the Irish Sea. We intend that our operations and restoration plans will enhance the site and its wider context now and well into the future.

About this Report

This report is the sixth Annual Environmental Report (AER) for each of the Gormanston and Hollywood facilities and contains data for the calendar year 2008. This report is available to download from *www.murphyenvironmental.ie* and previous AERs are available on request.

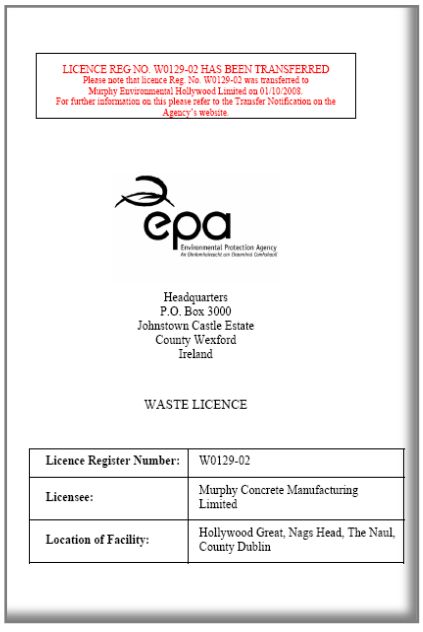
ii Hollywood: A Key Waste Management Facility in Ireland

About the Hollywood Facility

Murphy Environmental Hollywood Ltd. holds a Waste Licence (Number W0129-02) from the Environmental Protection Agency ('EPA', also referred to as 'the Agency') for an inert landfill at Hollywood, Naul in North County Dublin.

Murphy Concrete Manufacturing Ltd. (MCM) began quarrying at the site in 1975. In 2003 Murphy Environmental was established as a trading division of MCM Ltd., to serve as the waste management division of the company. Murphy Environmental is responsible for all aspects of the management and operation of the landfill and compliance with the Waste Licence. We operate a second inert Waste Licence (Reference W0151-01) at Gormanston, Co. Meath.

The sale of aggregate product on a commercial basis from MCM Hollywood ceased at the end of 2007 and quarrying operations were inactive in 2008. The focus of operations will now remain on the full and complete restoration of the site in line with pre-quarrying levels, in accordance with the conditions of planning and our EPA Waste Licence.



LICENCE REG NO. W0129-02 HAS BEEN TRANSFERRED
Please note that licence Reg. No. W0129-02 was transferred to Murphy Environmental Hollywood Limited on 01/10/2008.
For further information on this please refer to the Transfer Notification on the Agency's website.

epa
Environmental Protection Agency

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

WASTE LICENCE

Licence Register Number:	W0129-02
Licensee:	Murphy Concrete Manufacturing Limited
Location of Facility:	Hollywood Great, Nags Head, The Naul, County Dublin

The EPA Waste Licence

The current Waste Licence for the Hollywood facility has the reference number W0129-02. W0129-02 was issued on the 21st May, 2008 (see details of the Waste Licence Review on Page 13). The original licence, W0129-01 (previously '129-1') was issued by the EPA in December 2002, following an application to restore and infill the quarry.

A full copy of our EPA Waste Licence, plus summaries of monitoring reports and a wide range of other information relating to the company can be downloaded from our website, *www.murphyenvironmental.ie*

The Genesis of *Murphy Environmental Hollywood Ltd.*

The Hollywood facility, and the Murphy group of companies in general, has seen tremendous growth over the past six years and it was decided, in 2008, to undertake a restructuring exercise, to take the Hollywood facility from under the MCM umbrella and set it up as a separate limited company.

This led to the establishment of *Murphy Environmental Hollywood Ltd.* (MEHL) on 1st October 2008. On this date also, the EPA accepted the Transfer of Waste Licence from *Murphy Concrete Manufacturing Limited* to *Murphy Environmental Hollywood Limited*.

To mark and address this new era for the Murphy group we created new branding for MEHL to ensure that it is recognised as a strong entity within the Murphy group of companies. Our new MEHL image is a statement of who we are and what we want to achieve as an environmentally-conscious waste management company, now and into the future.

M.E.H.L
HOLLYWOOD
MURPHY ENVIRONMENTAL
HOLLYWOOD LTD

Construction & Demolition Waste in Ireland

Latest EPA figures (*EPA Waste Report* published in 2009) show that the total quantity of construction and demolition (C&D) waste collected in 2007 was estimated at 17.8 million tonnes, an increase of 5.8% on 2006. During 2007, a reported 12.8 million tonnes (71.8%) of C&D waste was recovered and 975,000 tonnes (5.4%) was disposed at authorised landfills and at waste permitted facilities.

The EPA report states that there continues to be a large discrepancy between the reported collection of C&D waste and its reported disposal and recovery. In 2007, there was a gap of over 4 million tonnes. Local authorities estimate that non-reporting Waste Collection Permit holders collected up to 633,000 tonnes of C&D waste. Of active permitted (recovery) sites, only 770 reported from a total 1,688 active sites, a reporting rate of 45%.

Local authorities estimate that non-reporting facility permit holders handled over 1.3 million tonnes. This still leaves a gap of over 2 million tonnes of waste and the EPA report states that "this in all likelihood represents a general lack of attention by the construction and demolition industries, and elements of the waste industry serving it, of the need to keep good records and provide reports to local authorities".

We're proud to say the Murphy Environmental licensed facilities (W0129-02 and W0151-01) offer exemplary waste records and reports to our customers, the EPA, Local Authorities and the lead authorities tasked with management of the waste collection permitting system.

The tables below provide details of the national statistics for C&D waste for 2007, and the significant contribution made by Murphy Environmental Hollywood Ltd. in terms of the national infrastructure for C&D waste management in Ireland;

Of the approximate 800,000 tonnes of C&D waste disposed at EPA licensed landfills in 2007, 54% of that was managed at Hollywood.

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Hollywood: A Key Waste Management Facility

Collection and Management of Construction & Demolition waste in Ireland, 2007 (EPA, 2009)

Total C&D Waste Collected (tonnes):		**17,791,745**
Management	**Recovery (tonnes)**	**Disposal (tonnes)**
Recovery at EPA licensed landfill	2,864,045	
Disposal at EPA licensed landfill		800,385
Recovery at LA licensed landfill	9,910,730	
Disposal at LA licensed landfill		174,549
Totals	**12,774,774**	**974,934**

Management of Construction & Demolition waste at Hollywood, 2007

Management	**Disposal (tonnes)**
Disposal at Hollywood, 2007	433,602
Disposal at EPA licensed landfills nationally, 2007	800,385
Percentage Disposed at Hollywood vs. Total C&D Waste Disposed at EPA Landfills, 2007	**54%**

iii Hollywood Restoration 2008

Under the Waste Management Act (1996), waste activities may be classified as waste disposal or waste recovery, within which there are a number of classes of activity. The Waste Licence (Ref. W0129-02) lists the activities which Murphy Environmental Hollywood Ltd. is licensed to carry out at Hollywood:

Disposal

Class 1: Deposit on, in or under land (including landfill)

Class 5: Specially engineered landfill, including placement into lined discrete cells, which are capped and isolated from one another and the environment

Class 13: Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced

Recovery

Class 3: Recycling or reclamation of metals and metal compounds

Class 4: Recycling or reclamation of other inorganic materials

Class 13: Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced

Class 5, Disposal, was the only licensed activity conducted on site in 2008.

Waste Types Accepted

Only inert waste is acceptable at Hollywood. Inert waste means waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will **not**:

- Dissolve, burn or physically or chemically react
- Biodegrade (decompose)
- Adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health.
- Generate a leachate (runoff) which could cause pollution or endanger the quality of surface water and/or groundwater.

The majority of the material accepted at Hollywood is comprised of soils and stones and other construction- or demolition-type material.

iii Hollywood Restoration 2008

Waste Acceptance Procedures

We have developed detailed and unique Waste Acceptance Procedures for Hollywood Landfill, in accordance with the EPA Waste Licence and *EU Council Decision (2003) Establishing Criteria and Procedures for the Acceptance of Waste at Landfills*.

Level 1 Basic Characterisation Testing:

Extensive laboratory testing of soil and leachate before it is delivered to site to ensure that the waste meets our acceptance criteria as per the licence. We use an independent, accredited laboratory for all of our testing requirements.

Level 2 "1 in 100" Compliance Testing:

For 1 in 100 loads which have undergone Level 1 Characterisation Testing for a given site, or if we are in any doubt as to whether or not the waste is acceptable, it must be sent for laboratory analysis to prove that it meets our requirements.

Level 3 On-Site Verification Testing:

Each and every load arriving at Hollywood Landfill is inspected visually for non-conforming waste.

Waste Collection Permits

All hauliers delivering waste to site must hold a valid Waste Collection Permit. Anyone collecting waste is required by law to hold a valid Waste Collection Permit. We maintain a detailed on-site register of Waste Collection Permits for all vehicles delivering waste to our facilities.

Weighbridge Software

Murphy Environmental operates specially-designed computer software to manage waste records. The exact location of where each load is tipped within the cell is recorded on the weighbridge software for future traceability.

Methods of Waste Deposition

Inert waste material is brought to the site in trucks from construction/ demolition or soil removal sites. Material is deposited directly into the active tipping area, as directed by the weighbridge operator and banksman.

Materials Accepted 2008

A summary of waste accepted in 2008, classified by EWC code, is presented in the table below and chart overleaf. It can be seen that *Soils & Stones* were the largest contributor to the waste accepted at the facility.

Approximately 226,000 tonnes of inert waste was accepted at Hollywood in 2008. Although this remains a significant tonnage, 2008 waste acceptance was almost 50% lower than 2007 figures.

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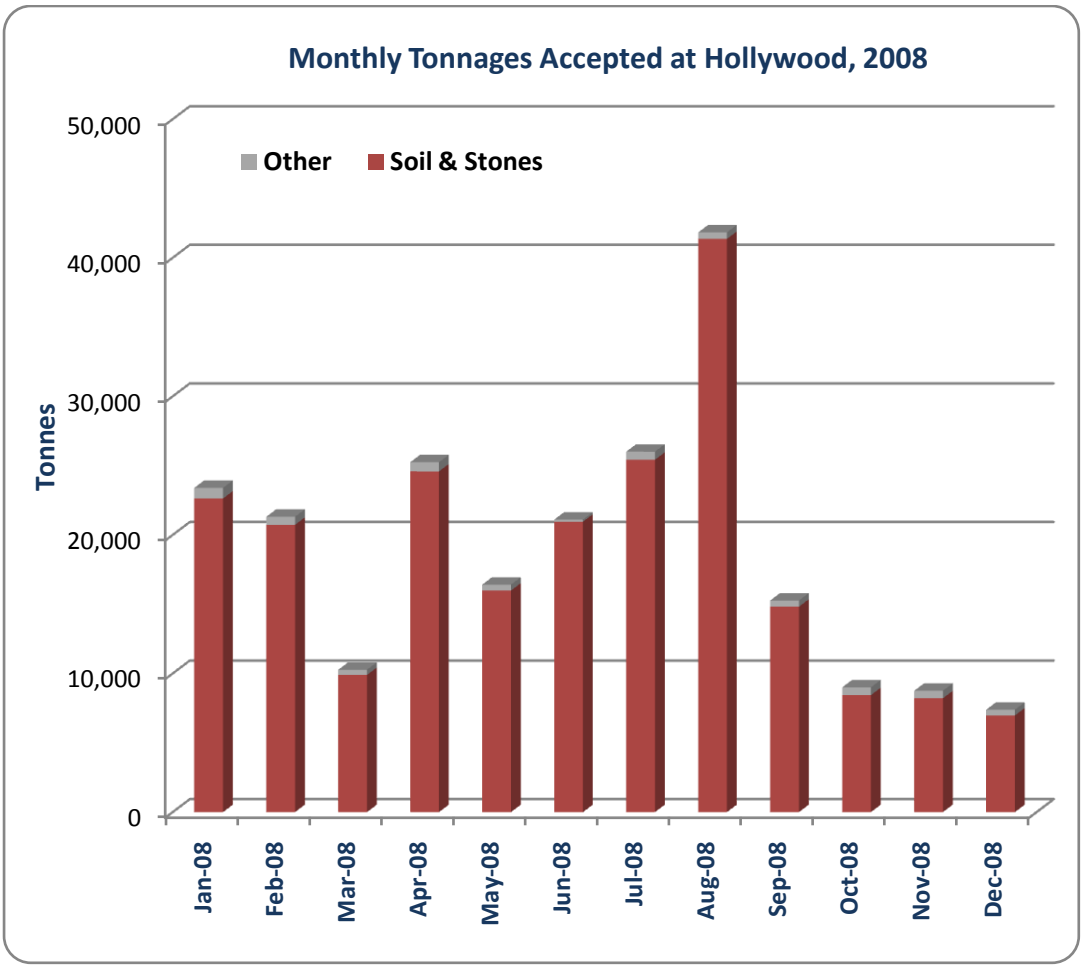
Hollywood Restoration 2008

Type Of Waste	EWC Code	Tonnes 2003	Tonnes 2004	Tonnes 2005	Tonnes 2006	Tonnes 2007	Tonnes 2008
Sand	01 04 09	87	-	-	-	-	-
Bottom Ash and Boiler Ash	10 01 01	302	5,619	2,686	6,236	1,399	688
Castings cores and moulds	10 10 06	-	1,326	1,397	1,425	-	-
Concrete	17 01 01	163	740	361	192	237	78
Bricks	17 01 02	-	-	-	14	-	
Mixture of Concrete, Bricks, Tiles and Ceramics	17 01 07	486	925	29	30	-	-
Glass	17 02 02	-	16	803	860	999	864
Bituminous Mixtures	17 03 02	-	368	-	303	326	-
Soil and Stones	17 05 04	15,087 ♦	134,875	295,014	255,357	426,311	220,028
Soil and Stones for capping	17 05 04	-	-	-	7	134	-
Insulation Materials	17 06 04	-	80	129	31	8.66	87
Mixed Construction and Demolition Waste	17 09 04	4,625	8,799	125	-	-	-
Wastewater Sludge	19 08 99	-	1,095	-	-	-	-
Sludge from water clarification	19 09 02	-	-	-	3,294	4,187	4,251
Spent Activated Carbon	19 09 04	-	2	-	-	-	-
Minerals (Sand & Stones)	19 12 09	-	19,191	30,429	2,793	-	-
Waste from Mechanical Treatment	19 12 12	-	-	-	69,212	-	-
Annual Total Tonnage		**20,750**	**173,037**	**330,973**	**339,753**	**433,602**	**225,996**
Total Tonnage Accepted To-date		**1,524,111**					

♦ Corrected for 2003 to include 432 tonnes of 17 05 01



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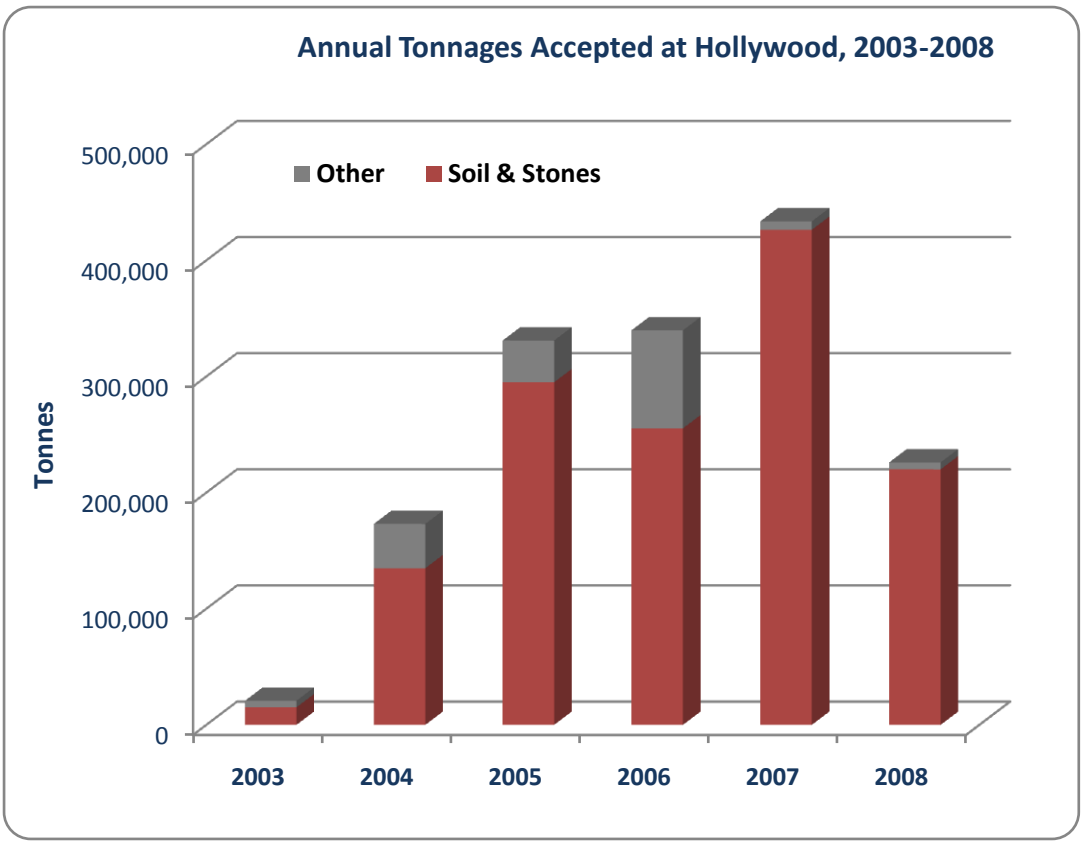
Hollywood Restoration 2008



Void Space Calculations

During 2007, an independent assessment was carried out to determine accurate and site-specific bulk density and compaction rates for soil and stones deposited at the Hollywood facility. A conversion factor of 2.0 tonnes/m^3 was determined for C&D waste (allowing for compaction and settlement). All AER figures reported pre-2007 have been corrected accordingly.

Remaining Capacity; Year in which Final Capacity is Expected to be Reached

A study completed by Golder Associates in November 2007 estimated the remaining void space to be 4,220,000m^3.

Our tonnage accepted in 2008 was 225,996 tonnes (estimated as 112,998m^3) and therefore our remaining void is calculated as 4,107,002m^3.

Based on W0129-02 annual licensed tonnage of 500,000 tonnes, it would take approximately 16 years to fill the remaining void space.

Proposed Restoration of the Site and Timescale of such Development

The restoration and aftercare of the facility shall be carried out in accordance with EPA requirements. A Closure Plan & Environmental Liabilities Assessment, as required under Licence W0129-02, has been drafted for the site (currently under internal review) and will be agreed with the Agency.

Restoration of Completed Phases

Five lined cells have been constructed at Hollywood to date, i.e. Cells 1 to 5.

- Cells 1 to 3 are approaching finished levels and will be capped and grassed in 2009.
- Cell 4 was constructed during 2008; no waste has been deposited in this cell to-date.
- Cell 5 was active during 2008 and is currently filled to less than 50% of its capacity.

iii
Hollywood Restoration 2008

Site Development Works 2008

The following site development/ infrastructural works were completed in 2008:

- Cells 4 and 5 were constructed during 2008, following necessary Specified Engineering Works and approvals from the Agency. These cells afford the site ample void space for incoming inert materials.
- A new borehole was commissioned at BH-4A to the east of the site.
- Chains (used for lifting, etc.) were independently certified as fit for purpose.
- 3 new computers were installed.

iv Management Systems

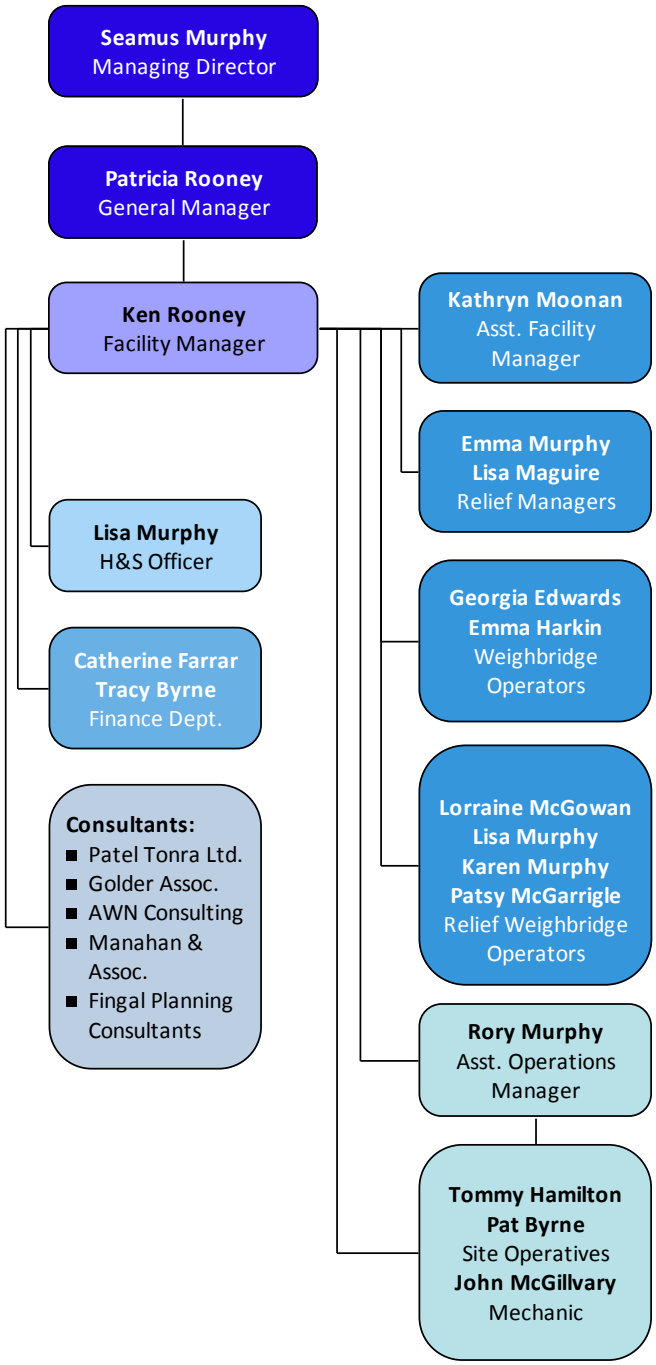
Management Team

Murphy Environmental has dedicated management teams at its Gormanston and Hollywood facilities. Patricia Rooney is the General Manager of the company, and Seamus Murphy is the Managing Director.

The Facility Manager at Hollywood is Ken Rooney and the Assistant Facility Manager is Kathryn Moonan. They are supported by an office team, who have responsibility for operating the weighbridge and office and data management duties, and an operations team, who direct and control incoming vehicles in restoration areas.

The company is further supported by its consultant teams – Patel Tonra Ltd., Environmental Consultants, Golder Associates, Engineering Consultants, AWN (Air and Noise Consultants), Fingal Planning Consultants and Manahan & Associates (Planning Consultants).

Organisation Chart



iv Management Systems

Environmental Management System

The Hollywood site was the first privately-operated landfill to receive accreditation to ISO14001, the international standard for Environmental Management Systems (EMS), in 2004.


Certification Europe

This is to certify that the

Environmental Management System

Of

Murphy Environmental Hollywood Ltd.

At

Hollywood Great, The Nags Head, The Naul, Co. Dublin

Has been assessed by Certification Europe and deemed to comply with the requirements of

ISO 14001:2004

This certificate is valid for the activities specified below:

The management of the disposal of mildly contaminated inert waste materials into engineered lined cells in a monitored environment in the full restoration of a limestone and shale quarry. (NACE Code 37)

Date of initial certification: 18th October 2006

This certificate is valid until: 19th January 2012

Chief Executive: Michael Brophy

Signature:

Chairman: Padraic A White

Signature:

Client Registration No.: 2006/346
Certificate Reference No.: A/2

Murphy Environmental Hollywood Ltd.

27 JAN 2009

File Ref:
Action By:
Act Taken:
Closed:

Procedures/EMS Documentation Developed, 2008

A number of new procedures and other EMS documentation were developed during 2008, as follows.

Objectives & Targets Training Procedure (P4.2.C)

- Outlines the creation, purpose, altering and completion of Objectives and Targets

Emergency Response Checklist (P4.7.B)

- A checklist for certain activities to be completed in the case of an emergency

Waste Collection Permit Audit (P5.5.B) and Form (F5.5.H)

- To audit check to ensure up-to-date Waste Collection Permits are held on site

Fuel Procedure (P6.5.A)

- Deals with the practices for receiving and usage of fuel onsite

Groundwater & Dust Monitoring Database (F5.1.F)

- To collate all groundwater and dust monitoring results within one database, to enable graphs to be generated and to view trends arising in results

Quarterly Monitoring Point Database (F5.5.G)

- To maintain a register of all monitoring locations

Quotation Form for Disposal of Waste (F6.4.C)

- For the provision of customer quotations

Employee Accident Report Form (F8.0.A.1)

- Records to be completed in the case of an employee accident

Non-Employee Accident Report Form (F8.0.A.2)

- Records to be completed in the case of non-employee accident

Company Machinery Vehicle Accident (F8.0.A.3)

- Records to be completed in the case of company vehicle accident

Non-Company Machinery Vehicle Accident (F8.0.A.4)

- Records to be completed in the case of non-company vehicle accident

Environmental Objectives and Targets

A core requirement of ISO14001:2004 is the setting and reviewing of environmental Objectives and Targets (O&T), structured around the overall goal of continual environmental improvement. Our O&T Register is an invaluable tool to help us manage our goals for the site. We use it to strategically plan for issues for the forthcoming year, and it serves as a reminder of key target dates.

The O&T schedule which was included in the 2007 AER is presented below. An indication of progress against targets is given. A number of additional targets which were included in the register over the course of the year are also listed.

Key:
◎ = Target = Achieved 2008
 = Not Achieved 2008

Performance against Objectives & Targets, 2008

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Progress
Submit AER to the Agency			◎										
Carry out annual noise monitoring and Noise at Work monitoring								◎					
Carry out daily meteorological monitoring	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
Carry out quarterly dust monitoring	◎			◎				◎					
Carry out quarterly leachate & groundwater monitoring	◎			◎			◎			◎			
Carry out bi-annual surface water monitoring				◎						◎			
Install computers in garages for improved upkeep of records				◎									(a)
Emergency Response Procedure drills			◎										
Mobile phone alarm system connected to H&S alarm	◎												(b)
Await full decision on EPA licence review			◎										
Submit revised planning application for new entrance				◎									
Construct Cell 4					◎								
Commence restoration of areas within cells 1 & 2 with grassland				◎									(c)

Notes on 2008 Targets Unachieved:

(a) Garage computers were not installed during 2008; target has been moved forward to 2009.

(b) Mobile phone alarm system connected to H&S alarm: the implementation of this scheme proved unviable due to constraints associated with the service provider.

(c) Cells 1-2 were not capped and grassed in 2008; this target has been moved forward to 2009.

Waste Licence Review: *How W0129-01 became W0129-02*

In July 2007, Murphy Environmental lodged an application with the EPA for a Waste Licence Review.

The review application sought permission to extend the landfill footprint of the facility, in line with the quarry footprint, and to increase the rate of infill to 500,000 tonnes per annum.

The review was clearly necessary as the extent of quarry excavations had changed and increased over the years, and since the application was made to restore the quarry in 1999.

From a business and operational perspective, we sought the flexibility to accept up to 500,000 tonnes per annum under the terms our new EPA Licence. This would also mean that the quarry is restored sooner, rather than later. The EPA granted us this licensed tonnage; however as shown in the *Hollywood Restoration 2008* section, tonnages were down significantly on previous years.

Objectives & Targets, 2009

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Submit AER to the Agency			◎									
Carry out annual noise monitoring and Noise at Work monitoring								◎				
Carry out daily meteorological monitoring	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
Carry out quarterly dust monitoring			◎			◎			◎		◎	
Carry out quarterly leachate & groundwater monitoring		◎		◎			◎			◎		
Carry out bi-annual surface water monitoring				◎						◎		
Install computers in garages for improved upkeep of records				◎								
Emergency Response Procedure drills			◎									
Cap and grass Cells 1-2							◎					
Topographical survey												◎

Health & Safety Systems

Lisa Murphy is the Health & Safety Officer for the company, and together with the managers across the business, has implemented wide-ranging H&S benefits since she commenced in her position in 2006.

H&S Induction DVD

In 2007 Murphy Environmental undertook the production of a Health & Safety and general company and site induction DVD, which is used for training of all new staff.

Safepass Training, 2008

18 staff members attained Safepass accreditation during April-May 2008.

Defibrillator

A defibrillator machine is installed in both the Hollywood and Gormanston site offices, owing to the high numbers of customers and visitors moving through each site on a daily basis. The defibrillator is normally used immediately following a cardiac arrest, to restart the heart rhythm. 11 of our staff have received accredited training in the use of the defibrillator.

First Aid Bags

First aid bags are installed at three strategic locations on each site: one in the offices, one in the garage/mobile mechanic's unit, and one located with a machine driver. Their positioning means that, in the event of an accident at any point on the site, a First Aider and a first aid bag can reach the casualty within a very short period of time.

Personal Alarm System

All site staff has been issued with personal alarms and air foghorns. Visitors and consultants involved in site work are also issued with such alarms.

Occupational Noise Monitoring

A Noise at Work survey was carried out at Hollywood during July 2008. The purpose of the survey was to determine if any of our operatives were exposed to excessive noise levels related to working with, at or near heavy equipment or machinery. The results of the survey indicated compliance with relevant legislative limit.

Financial Provision

Murphy Environmental Hollywood Ltd. has established a Liabilities and Restoration Fund for Hollywood, following consultation with the Agency.

During 2008, and due to the separation of the Murphy group of companies which operates the Gormanston and Hollywood facilities, separate and independent Liabilities Risk and Restoration & Aftercare Funds were put in place, to address requirements for each of the sites on its own terms.

v Training

Our company training and conference room, located at Gormanston, was opened in June 2006. This includes a fully integrated computer system, ceiling-mounted projector and touch-screen/whiteboard. This resource offers us excellent facilities for internal staff training and allows external trainers to deliver their courses at our site offices.

Personal training files for all staff are securely retained in the training room, where staff can keep notes and records of training they have received, and where copies of training certificates are retained.

Overview of Training Received by Murphy Environmental Staff in 2008

At Murphy Environmental, training of new staff and ongoing training for existing staff is emphasised at each stage of an employee's career.

All staff employed by Murphy Environmental has a foundation level of waste management knowledge. The FÁS National Waste Management Training programme has been completed by all Facility Managers and Assistant Facility Managers in the company.

Our Hollywood Facility Managers completed their Fás On-site Competency Assessment in Waste Management during 2008, and are part of a select number of Waste Managers in the country to hold this qualification.

Developing 'In-house' Training Skills

In addition to management qualifications obtained from external organisations, a strong emphasis is placed on internal training at all levels in the company, and records of all such training events are retained on site.

This became more evident in 2008, as internal specialist skills and experience are developed within the company.

New weighbridge operatives are given intensive training on the Waste Acceptance Procedures and weighbridge software. This is backed up by Waste Licence training, and training on specific parts of the EMS, as required.

Benefits of Internal Training to Murphy Environmental

From our point of view, developing our in-house training skills has a range of benefits:

- We can modify and 'fine tune' the content of the training to suit our specific training requirements and personnel.
- We use our in-house training programmes to encourage co-operation and foster team-building, which is particularly important at the staff induction phase.
- We sometimes mix the trainee group between operational and office-based staff, and between various levels and functions within the organisation. This helps to give all sections of the business an appreciation and understanding of each other's roles.
- The training course does not end when the trainer leaves the room: the skills taught during the course will be put into practice under the supervision, and with the assistance of, colleagues. This means that the training can be evaluated regularly.
- We can deliver training at convenient dates that suit the team and the business. Furthermore training can take place at our premises, thus avoiding travel time for all attendees.
- It is far more cost-effective to conduct in-house training than to send teams out for public training.

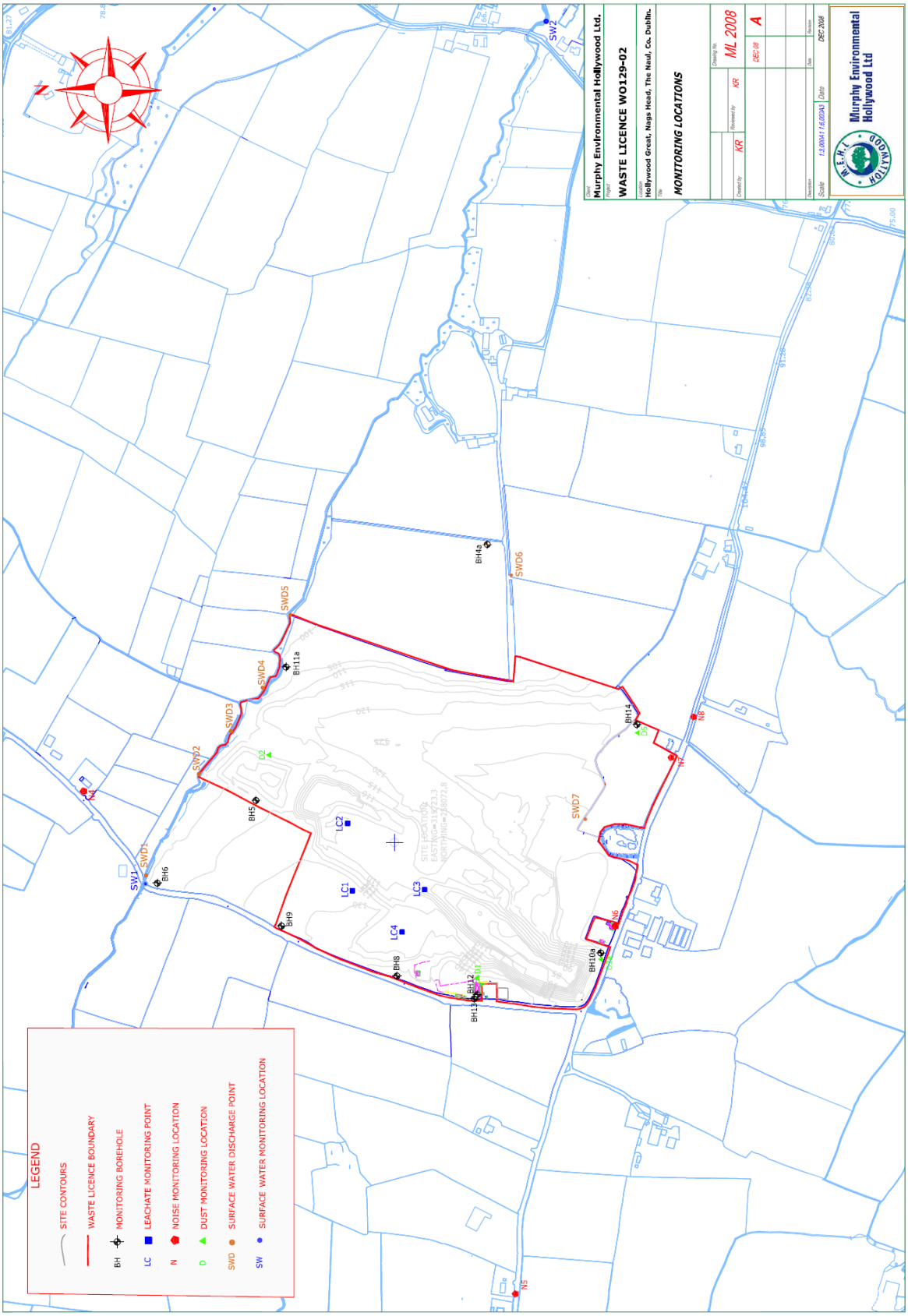
Training Completed 2008

Month, 2008	Training	Course Provider	Number of Staff Trained
Jan/Feb/Jun	Legal Training	Patel Tonra Ltd	5
Feb	EPA Training Day on PRTR and Electronic Annual Reporting	EPA	2
Feb	EPA Training Day on Waste Treatment Survey	EPA	2
Mar	Objectives & Targets Training	Internal	2
Apr	Completion of Sample Log and Register	Internal	2
Apr	Risk-based Evaluation of Infrastructure Projects	Internal	1
Jun/Jul/ Sept/ Oct	MCM Weighbridge Training	Internal	4
Jun	Negotiation Skills for Engineers	Engineers Ireland	1
Jun	Accounts Technician Training	Institute of Accounting Technicians in Ireland (IATI)	1
Jun	Post Grad. Dip. in Environmental Engineering	Trinity College	1
Jul	GA2000 Gas Software	CSL	2
Jul/Aug	Web design Course	IBaT	1
Jul	Internal Auditor Training	CE Europe	4
Aug	Fás Site Assessment	Fás	2
Sept	Site Induction Gormanston	Internal	1
Sept	SAGE Accounts Training	Internal	1
Oct	PO-GRNI Training	Internal	6
Oct	Updates to Legal Register	Patel Tonra Ltd	4
Oct	Site Induction Hollywood	Internal	1
Oct	MCM Cash Sales Invoicing	Internal	1
Oct	Murphy Environmental Gormanston weighbridge training, EMS & Company Folder	Internal	2
Oct	Uploading Invoices to SAGE; running statements	Internal	2
Nov	PO-GRNI Procedure and month-end cut-offs	Internal	6
Nov	Training on how to become a 'super user' on the server	Liam O'Connor	1
Nov	All-Island Public Consultation Conference, Croke Park	Conference	1
Nov	Alcontrol Laboratories Contaminated Land Analysis	Alcontrol	1

v
Training

vi Monitoring and Measurement

Hollywood Environmental Monitoring Locations 2008



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Monitoring and Measurement

Monitoring Requirements

Murphy Environmental Hollywood Ltd. is required to conduct regular monitoring to ensure that no environmental impact is occurring as a result of site operations. All monitoring reports are submitted to the EPA, and summaries are available for all to view at www.murphyenvironmental.ie

Monitoring of noise, dust, surface water, groundwater, leachate and meteorology is conducted throughout the year.

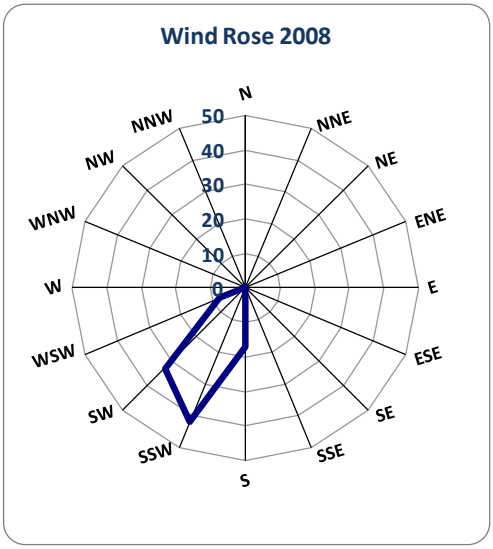
Meteorological Data

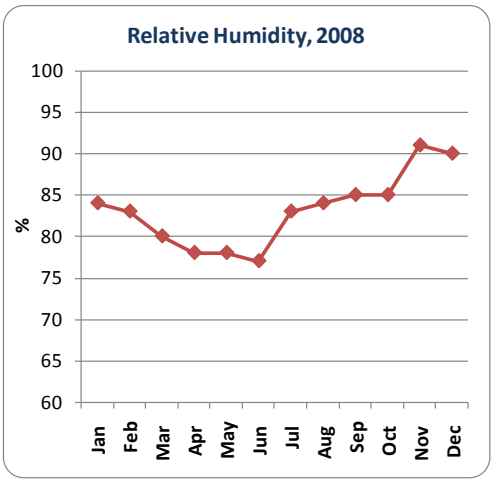
Meteorological data was obtained from the meteorological station situated at Dublin Airport. The parameters obtained were: precipitation, temperature (average), wind speed and direction, relative humidity and atmospheric pressure (as per Schedule D.5 of the Waste Licence).

Wind Direction

The wind rose for 2008 indicates that winds were mainly from a south-westerly direction.

Daily wind data and all meteorological data required under the licence are retained on site.

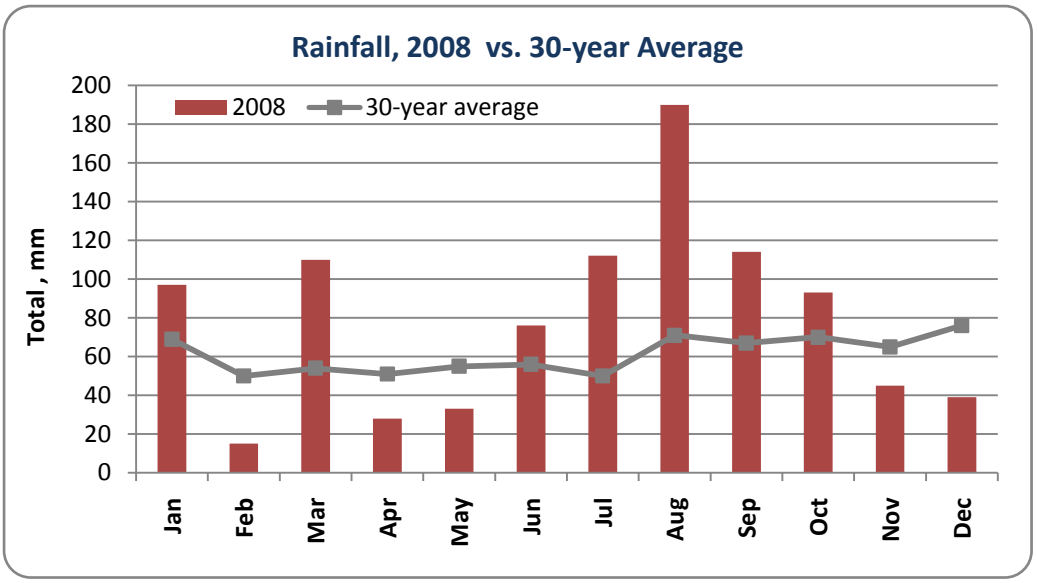


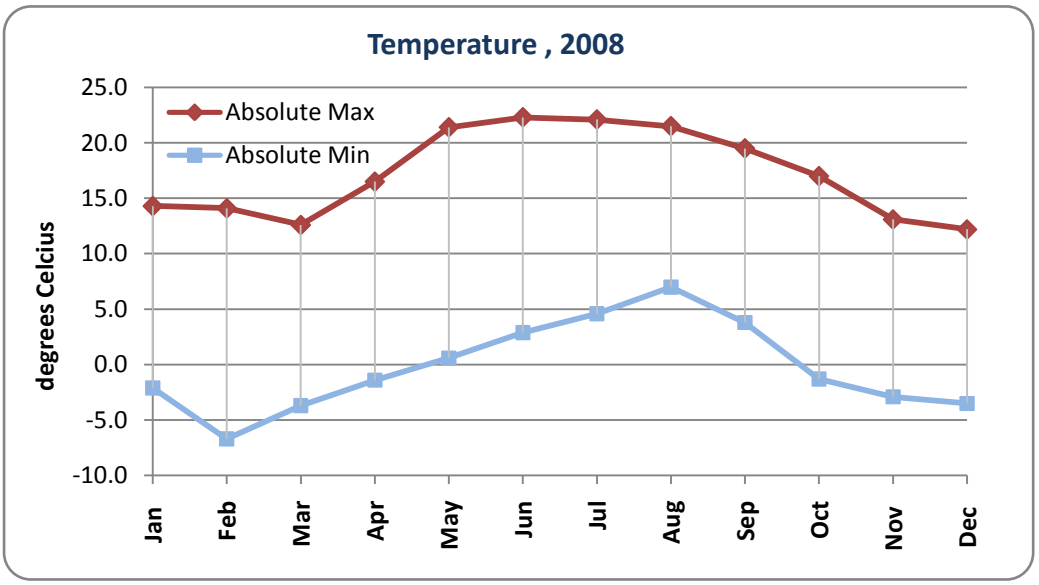


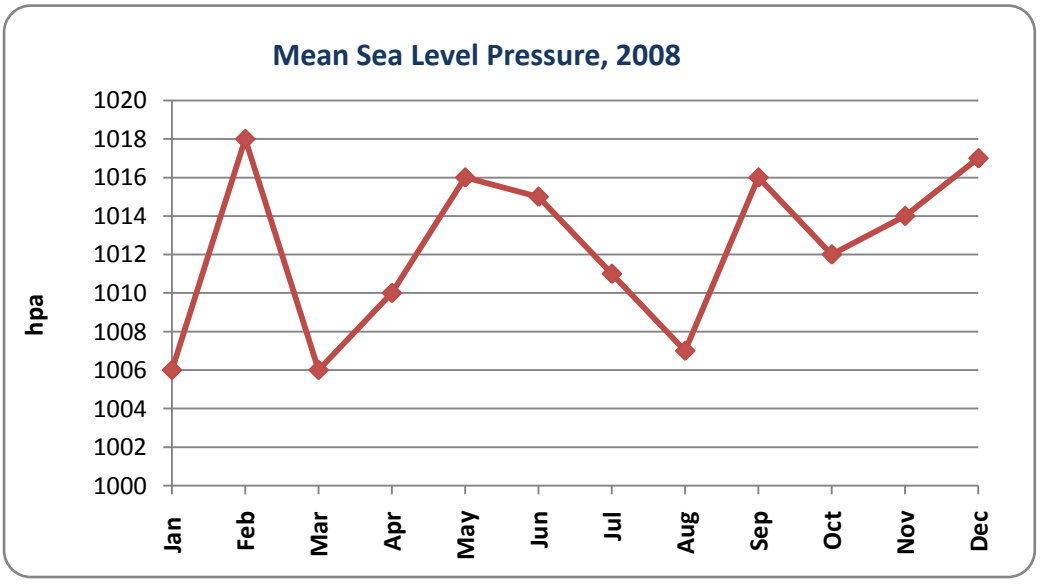
Rainfall

The total rainfall for 2008 was 952mm.

This is significantly higher than the 30-year average (734mm); furthermore there were significant variations within individual months, e.g. March 2008 rainfall was 110mm compared with a 30-year average rainfall amount of only 54mm. The months of July and August were exceptionally wet; the combined total of the two months was 302mm of rainfall, more than double the 30-year average for these two months (121mm). There were three days in August 2008 when daily rainfall exceeded 20mm.







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Monitoring and Measurement

Water Balance Equation

The water balance equation is estimated as follows:

- Annual Rainfall, 2008 = 952mm
- Annual Evapotranspiration, 2008 = 455mm

It is assumed that water losses during operations will be numerically approximately 50% of evapotranspiration from vegetated surfaces, i.e. 227.5 mm/year.

- Effective Rainfall = 952mm – 227.5mm = 724.5mm/year

The surface area of Cells 1 to 3 (including Cell 3 Extension) at the facility is 23,300m^2. Therefore the amount of recharge within Cells 1 to 3 is estimated as:

- 23,300m^2 x 0.7245m/year = 16,880 m^3/year.

Dust Monitoring

Under W0129-01, Murphy Environmental was required to monitor dust levels at four locations (D1, D2, D3 and D4) once per quarter. The frequency of dust monitoring was reduced to biannually under the terms of W0129-02. Dust emission limits are set in Schedule C.2 of the licence.

Dust is measured using a Bergerhoff dust gauge. This is exposed over a 30-day period to collect bulk dust deposition. The gauge consists of a gauge bottle supported on a stand of approximately 1.5 metres high. The samples collected are then transferred to a laboratory for gravimetric (weight) analysis to determine the concentration of deposit material in each gauge bottle.

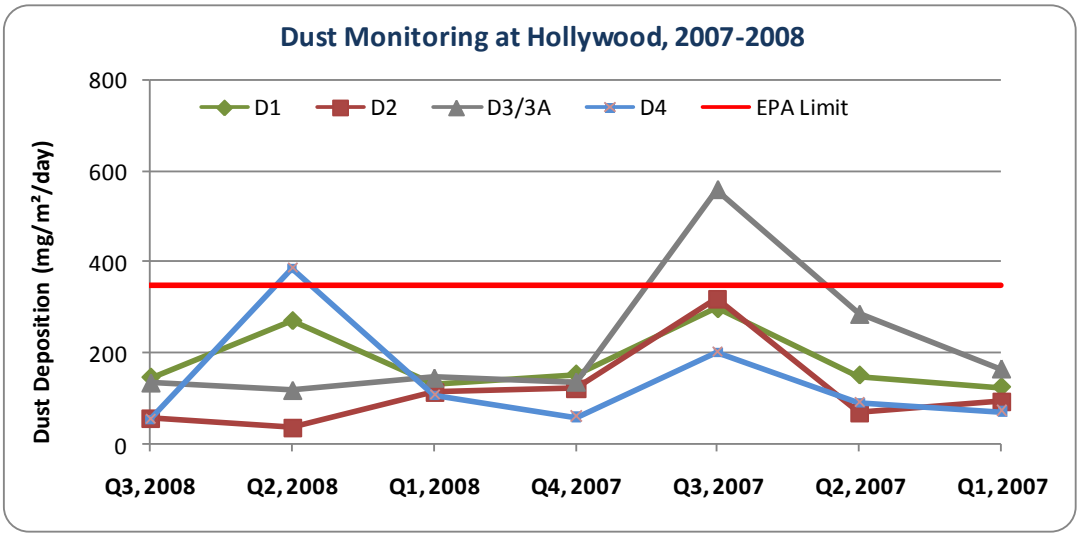
Dust Monitoring Results, 2008

Three dust surveys were conducted at the Hollywood site during 2008.

There was one breach of the licence limit for dust, with the Hollywood site achieving an overall compliance rate for dust monitoring of 92% for 2008.

Dust monitoring results at D4 were in excess of the licence limits during Quarter 2, 2008. This was thought to be related to the dry weather during this monitoring round and increased soil movement activity at this location.

Dust management techniques such as dampening of roads and hardstand areas using the water bowser, sprinklers, wheelwash and roadsweeper are used by Murphy Environmental Hollywood Ltd. on an ongoing basis to manage and minimise dust levels.



vi Monitoring and Measurement

Noise Monitoring

Murphy Environmental must monitor noise levels at 5 locations (N4, N5, N6, N7 and N8) once per annum (Schedule D.3). Noise emission limits are set in the licence (Schedule C.1). Noise is monitored using a specialist noise meter.

Noise Monitoring Results 2008

The annual noise survey was conducted on the 14-16th July 2008. The results from the noise survey indicated that noise levels exceeded the EPA daytime limit of 55 dB(A) and the night-time lime of 45 dB(A) at a number of monitoring points; however the dominant noise source at all locations was road traffic along the local road network, and site operations at the Murphy Environmental Hollywood Ltd. facility were not audible at any of the locations.

The Murphy Environmental Hollywood Ltd. facility was not operating during the night-time survey period and did not contribute to the noise environment in the area during this period.

Noise Monitoring (Daytime), 2008

	Daytime Noise LA_{eq} dB(A)	
Location	Result	EPA Limit
N4	52	**55**
N5	57	**55**
N6	58	**55**
N7	63	**55**
N8	63	**55**

Noise Monitoring (Night-time), 2008

	Night-time Noise LA_{eq} dB(A)	
Location	Result	EPA Limit
N4	45	**45**
N5	49	**45**
N6	44	**45**
N7	52	**45**
N8	45	**45**

N4 - located along road; north of the facility

N5 - located along road; west of the facility

N6 - located along road; south-east of the facility

N7 - located along the local road; beyond southern boundary of the site

N8 - located along the local road; beyond the southern boundary of the site

In light of the results of the noise surveys, it was concluded that the Murphy Environmental Hollywood Ltd. facility was in compliance with the noise limits specified in the Waste Licence.

Surface Water Monitoring

Surface water monitoring was carried out during Quarters 2 and 4, 2008 at SW-1 (upstream) and SW-2 (downstream).

SW-1 and SW-2 were found to be in non-compliance with the Surface Water Regulations for sulphate during Quarter 2, 2008. Both of these monitoring locations were re-sampled for sulphate on 2nd May 2008. SW-1 was found to be in compliance with the Surface Water Regulations. SW-2 marginally exceeded the Surface Water Regulations.

All other parameters for surface water monitoring were in compliance with the relevant standards.

Surface Water Discharge Monitoring

Any water which is discharged from the site to local streams, etc. must be monitored by Murphy Environmental Hollywood Ltd. – this is known as 'surface water discharge' (SWD) monitoring. All such discharge water is clean, e.g. runoff from concreted hardstanding areas, which has passed through a silt trap and oil interceptor, or water pumped from the base of the quarry for access and safety purposes.

The potential surface water discharge points are as follows:

- SWD1: Water discharge after flowing through silt trap/oil interceptor
- SWD2: Water pumped from base of quarry

- SWD3: Water discharge from settlement pond
- SWD4: Quarry water discharge from rock cell at south of site
- SWD5: Quarry water pumped from rock cell at the south of the site (discharge currently inactive at this point, but may be required in the future)
- SWD6: Quarry water pumped from rock cell at south of site: point of discharge at the licence boundary
- SWD7: Quarry water pumped from rock cell at south of site: point of discharge from underground pipe to open drainage ditch

The results for suspended solids for 2008 were as follows:

Results for Suspended Solids in Surface Water Discharge Points, 2008

	Suspended Solids (mg/l)			
SWD point	Q1	Q2	Q3	Q4
SWD1	Dry	Dry	Dry	Dry
SWD2	Dry	Dry	Dry	Dry
SWD3	Dry	Dry	<10	Dry
SWD4	Dry	Dry	Dry	Dry
SWD5	Dry	Dry	Dry	Dry
SWD6	261	<10	<10	35
SWD7	19	Dry	<10	<10

There was one breach of the licence limit for suspended solids discharged to surface water, i.e. at SWD6 in Quarter 1, 2008.

This was thought to be due to heavy rainfall causing soil run-off in the open ditch prior to this monitoring point.

Groundwater Monitoring

Murphy Environmental Hollywood Ltd. monitors groundwater at 10 locations (BH4, BH5, BH6, BH8, BH9, BH10A, BH11A, BH12, BH13 and BH14) on a quarterly basis, in accordance with the Waste Licence.

Groundwater monitoring includes measuring the depth of groundwater, plus taking a sample of water from the borehole for analysis of prescribed parameters.

The water level in each borehole is recorded using a 'dip meter'. A water sample is extracted by using an inertial pump, which feeds a column of water upwards through a length of sampling tubing, or by using a water bailer.

Groundwater Monitoring Results, 2008

Groundwater monitoring was conducted during Quarters 1, 2, 3 and 4 of 2008. Results were compared against EU Drinking Water Regulations.

During 2008, a total of over 450 individual analytical tests were conducted on groundwater samples.

The table opposite provides an indication of the overall level of compliance for all of the parameters measured quarterly during 2008, at all monitoring locations in and around the site.

The vast majority complied with relevant legislation and guideline limits. If there is a breach of guideline limits, Murphy Environmental must report this as an 'incident' to the EPA.

Groundwater 'Incidents' 2008

Murphy Environmental has continually reported a number of parameters to the Agency as incidents since monitoring commenced in 2003, although these parameters are known to be naturally-occurring at the site.

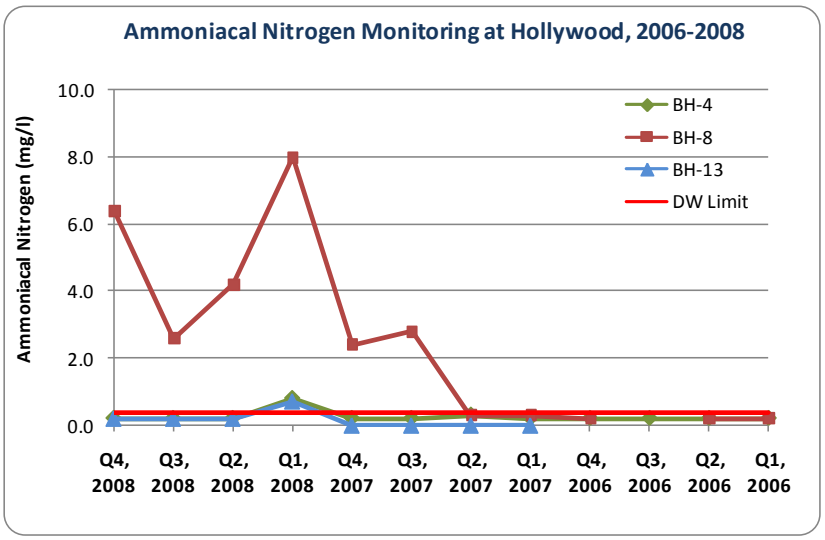
During 2006, Murphy Environmental received approval from the EPA to discontinue incident reporting of arsenic and manganese (although they will continue to be monitored and reported to the EPA) as levels detected in groundwater boreholes are associated with the geology of the quarry and the surrounding bedrock.

The overall 2008 compliance rate for quarterly monitoring parameters in groundwater boreholes was 96% (compared against limits prescribed in the Drinking Water Directive 98/83/EC).

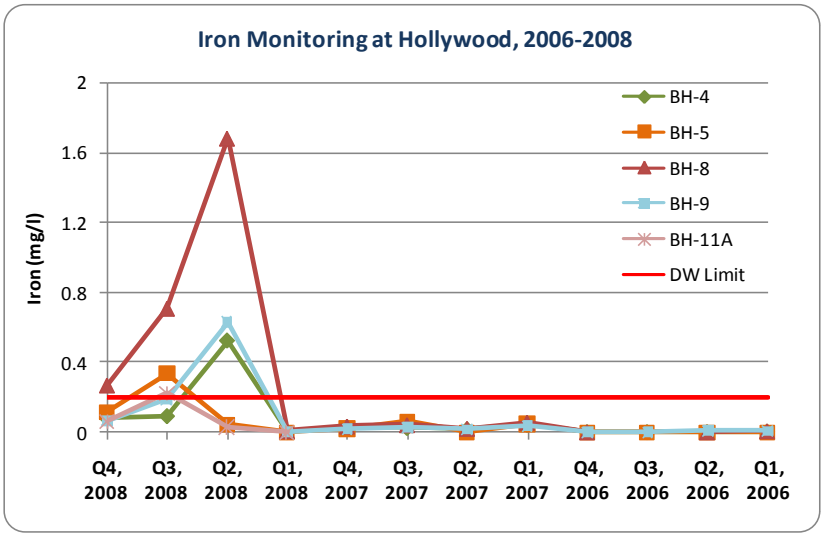
Compliance with Quarterly Monitoring Requirements in Groundwater Boreholes, 2008

Quarterly Groundwater Parameter	Total No. of tests*	2008 Results vs. Drinking Water Limit Values		% Compliance
		In Compliance	Breached Limit Values	
Ammoniacal Nitrogen	39	33	6	85%
Chloride	39	39	0	100%
Dissolved Oxygen	29	29	0	100%
Electrical Conductivity	39	39	0	100%
pH	38	35	3	92%
Temperature	29	29	0	100%
Calcium	38	38	0	100%
Iron	39	32	7	82%
Potassium	39	39	0	100%
Sulphate	39	37	2	95%
Sodium	39	38	1	97%
Total Oxidised Nitrogen	39	39	0	100%
Total Organic Carbon	39	39	0	100%
Phenols	39	39	0	100%

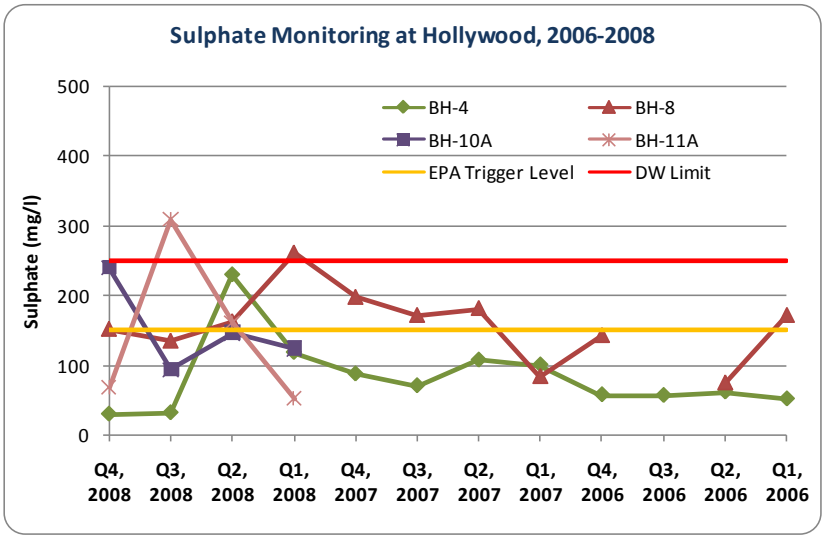
* Generally 10 Boreholes x 4 Sampling Rounds



The 2008 compliance rate for Ammoniacal Nitrogen was 85% (compared against Drinking Water Regulation limits)



The 2008 compliance rate for Iron was 82% (compared against Drinking Water Regulation limits)



The 2008 compliance rate for Sulphate was 95% (compared against Drinking Water Regulation limits)

Please note that charts above depict only monitoring points which breached EPA trigger levels or Drinking Water Directive limits; all other monitoring points complied with prescribed limit values.

vi Monitoring and Measurement

Ammoniacal Nitrogen

Ammoniacal Nitrogen marginally exceeded guideline limits in BH-4 and BH-13 during 2008. BH-8 showed levels significantly in excess of limit values during the year. BH-8 exhibited some anomalous results and the integrity of this borehole has been called into question. The presence of Ammoniacal Nitrogen is thought to have been associated with agricultural or sewage sources in the vicinity of the site. This trend was observed in 2007 monitoring also, although results for BH-8 for 2008 were notably higher than 2007. There is no indication that the operation of the facility is increasing the ammoniacal nitrogen concentration locally.

Iron

Iron is present in significant amounts in soil and rocks. High iron levels means that water will be brown in colour, prone to black scale and will taste unpleasant. The bedrock geology of the area is thought to contribute to elevated levels of metals, such as iron and manganese. Iron levels peaked in Quarter 2, 2008 in BH-4, BH-8 and BH-9.

Sulphate

Sulphate was twice detected at levels above Drinking Water Regulation limits during 2008. There were also a number of exceedances of the EPA Trigger Level in BH-4, BH-8, BH-10A and BH-11A during 2008.

Total & Faecal Coliforms

Microbiological monitoring of the groundwater is required annually; this was carried out at the site during Q1, 2008. Faecal Coliforms were found at levels above Drinking Water Regulation limits in BH-4, BH-5, BH-8, BH-10A and BH-14. These results are thought to have been associated with agricultural or sewage sources in the vicinity of the site. Coliforms are not generally an indicator of landfill runoff.

Other Groundwater Monitoring Non-Compliances

There were non-compliances for the following, which were reported to the Agency as incidents:

- pH in BH-5, BH-8 and BH-14 in Q4, 2008
- Sodium in BH-5 in Q4, 2008
- Conductivity in BH-11A in Q1, 2008

Leachate Monitoring

Leachate is formed when water passes through waste in a landfill cell. Leachate monitoring is required biannually at the site. During Quarter 1 and 3, 2008, samples were collected from LC-1, LC-2 and LC-3.

Leachate analytical results were consistent with previous sampling rounds showing levels of sulphate, chloride, conductivity, Chemical Oxygen Demand and ammoniacal nitrogen in exceedence of the Class 3 Surface Water Limits.

Estimated Indirect Emissions to Groundwater

Groundwater emissions during 2008 are estimated to be negligible due to the very low permeability of the landfill cell liner.

Coliform Analysis in Groundwater Boreholes, 2007-2008

Bore-hole Ref.	Faecal Coliforms (cfus/100ml)			Total Coliforms (cfus/100ml)		
	Q1, 2008	Q1, 2007	DW Limit	Q1, 2008	Q1, 2007	DW Limit
BH-4	1	<1	0	200	10	0
BH-5	26	<1	0	400	12	0
BH-6	<1	<1	0	11	30	0
BH-8	12	<1	0	400	15	0
BH-9	<1	10	0	140	880	0
BH-10A	30	Dry	0	200	Dry	0
BH-11A	<1	<1	0	2,600	1	0
BH-13	<1	-	0	2,500	-	0
BH-14	10	-	0	70	-	0

Composition of Wastes Removed off-site

General municipal waste (e.g. from the site canteen) and waste paper are collected and removed off-site by permitted waste collectors for recycling or disposal. The quantity of waste removed during 2008 is detailed in the table below.

Off-site Waste Removal, 2008

Waste Removed Off Site	Approx. Weight (tonnes)
Mixed Waste	5.64
Recycled Waste	0.66
Lead Batteries	0.68
Total (Tonnes)	**6.98**

In addition, the following was removed off-site during 2008: 2,000 litres of waste oil; 1 oily rag bin; 4,240-litre filter bins; and 9,000-litre petrol interceptor contents.

Bund Testing

A bund integrity test was completed in September 2007; no bund testing was completed during 2008.

Energy & Resource Use

Murphy Environmental's energy provider is Airtricity, one of Ireland's green renewable energy providers. Their power is sourced from windfarms and from certified hydro-power stations.

Electricity Use 2008

Based on electricity bills, the energy consumption at Murphy Environmental Hollywood for 2008 was 147,960 kWh.

Electricity use increased during the year due to the substitution of a diesel-powered submersible pump for an electrically-powered one.

Electricity-related Carbon Emissions, 2008

Airtricity data from 2008 states that 89% of its energy is sourced from renewable sources, as opposed to 9% for ESB. Electricity generated by Airtricity produces 70.4 grams CO_2 per kWh, as opposed to 549.09 grams for non-renewable energy provider (Source: Airtricity).

The chart opposite shows the actual CO_2 emissions based on electricity use at Hollywood in 2008, and potential emissions, if the same amount of electricity had been sourced from non-renewable sources.

Based on 2008 consumption rates, CO_2 emissions associated with Murphy Environmental Hollywood Ltd. electricity usage were 10.4 tonnes.

Murphy Environmental Hollywood Ltd. avoided over 70 tonnes of CO_2 emissions in 2008 by switching to a green energy provider.

The average Irish car releases 167g CO_2/km, with an average mileage of 16,894 km/annum, i.e. total annual CO_2 emissions of approximately 2.8 tonnes.

In 2008, Murphy Environmental Hollywood Ltd. avoided the release of 70 tonnes of CO_2 emissions to the atmosphere – this is the equivalent of taking 25 cars off the road for a year.

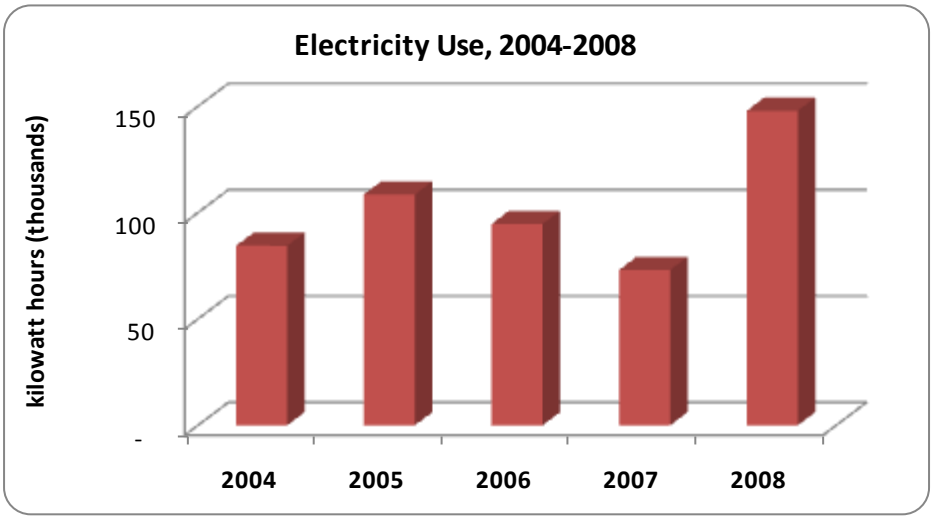
Diesel

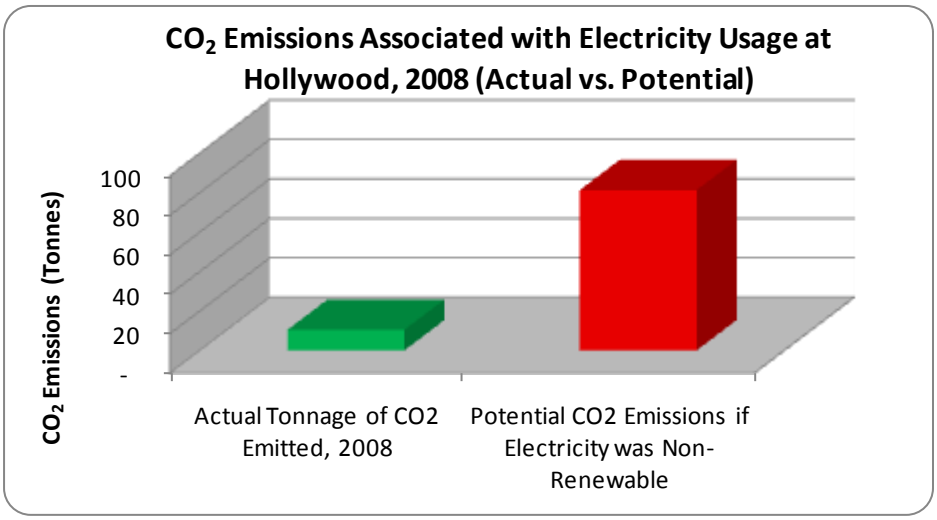
During 2008, a total of 36,742 litres of road diesel and 330,866 litres of green diesel were used by plant associated with activities at Murphy Environmental Hollywood Ltd.

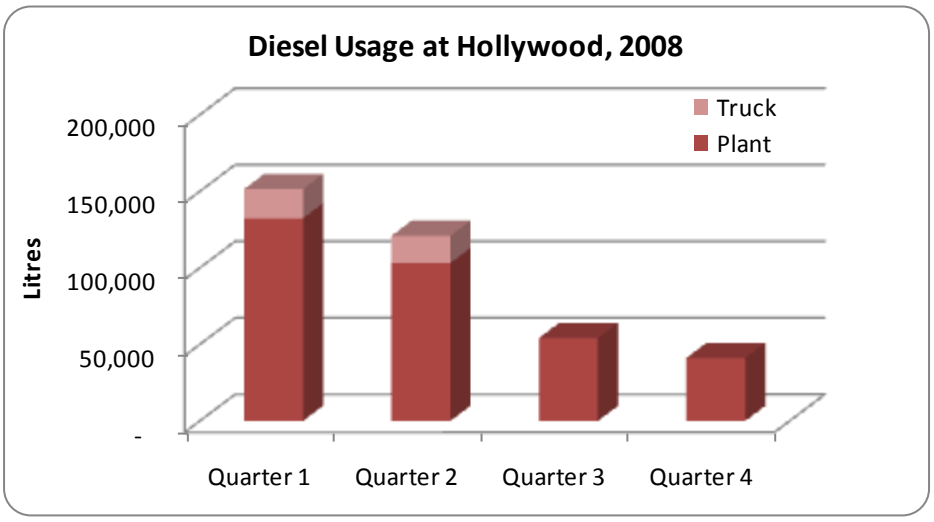
Water

Water usage at Murphy Environmental Hollywood Ltd. during 2008 was 2,565m^3.

vi Monitoring and Measurement







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Monitoring and Measurement

By using electricity generated from renewable energy sources, during 2008, Murphy Environmental Hollywood Ltd. avoided the release of the equivalent of 25 cars' CO_2 emissions.

vii Engaging with the Community

Open and Transparent

All of our monitoring information, EPA correspondence, etc. is on the public record. It is available for inspection at our site offices or at the EPA Inspectorate Office in Clonskeagh, Dublin. We also make our monitoring results and other company information available at our website, www.murphyenvironmental.ie.

Public Commitments

Murphy Environmental has developed a communications procedure to allow public access to facility information. The main methods are:

- The company website, www.murphyenvironmental.ie, which is updated regularly with company news, monitoring results and licence information.
- Annual Environmental Reports, available on our website
- Company newsletter
- Site notice board
- Complaints are recorded and tracked
- An information pack is available to customers and interested parties
- Site documentation is available for inspection at the site office
- Our Facility Managers are available to answer any queries

We are also in routine and regular communication with the Agency with reference to compliance requirements and requests for information.

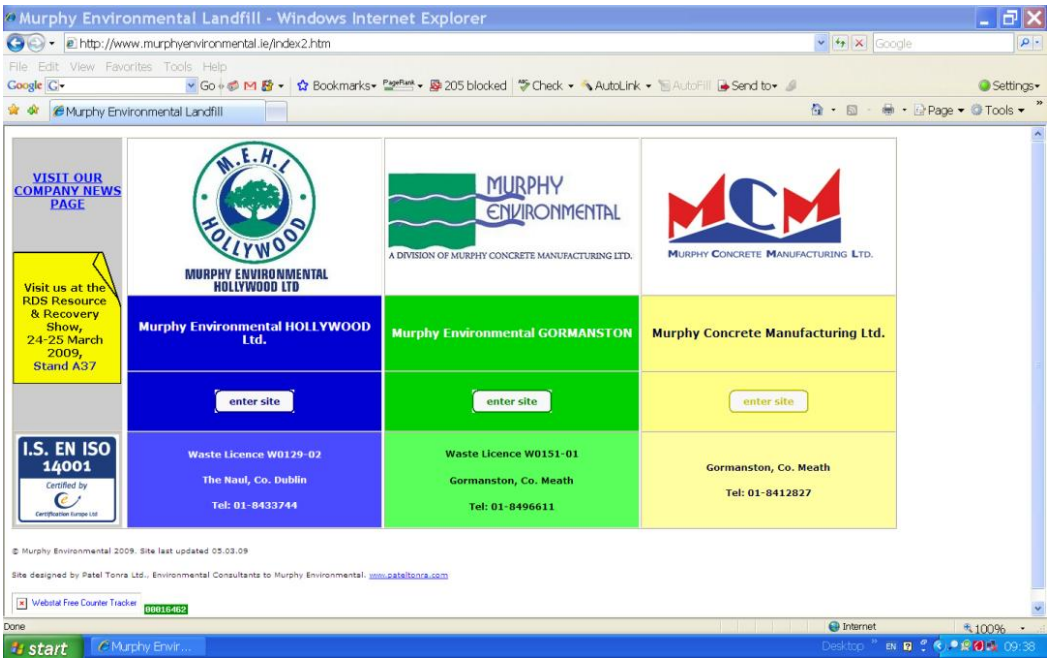
Avoiding Nuisance

Murphy Environmental Hollywood Ltd. has invested in a number of pieces of equipment in order to better manage our environmental impacts. Roads in the vicinity of the site are serviced by a facility roadsweeper and water bowser. All trucks exiting our site must use the wheelwash, further reducing the potential for the generation of mud on roads.

Daily, weekly and monthly site inspections are carried out to ensure that the site is kept clean and free of anything that might be perceived to cause a nuisance to site neighbours.

Complaints

Murphy Environmental Hollywood Ltd. logs all complaints or comments relating to the site which may be received directly by them, by the EPA or other parties. There were no public complaints/concerns received during 2008.



www.murphyenvironmental.ie

Environmental Incidents

Any incident that occurs on site must be reported to the EPA in accordance with the licence conditions. Incidents arising during 2008 are summarised in the table below. An incident is defined by the Waste Licence as:

- An emergency
- Any emission which does not comply with the requirements of the licence
- Any trigger level specified in the licence which is attained or exceeded
- Any indication that environmental pollution has, or may have, taken place
- The non-acceptance or rejection of any waste load at the facility

The following incidents were reported to the EPA during 2008 (please see the 'Monitoring and Measurement' Section for further details):

No.	Date	Incident
2008_01	01/04/08	Surface water and groundwater monitoring exceedence
2008_02	18/03/08	Break-in
2008_03	29/04/08	Fuel Spillage
2008_04	10/06/08	Surface water and groundwater monitoring exceedence
2008_05	10/06/08	Dust monitoring exceedence
2008_06	18/06/08	Break-in
2008_07	18/12/08	Groundwater monitoring exceedence
2008_08	23/09/08	Groundwater monitoring exceedence

vii Engaging with the Community

Local Schools Sponsorship Programme

Murphy Environmental launched an environmental sponsorship programme of local primary schools in December 2005. We made a commitment to maintain the initiative for a minimum of five years, with the objective of fostering long-term projects. Projects which promote and encourage the preservation and protection of the environment are rewarded, with the specifics of the selected projects entirely at the schools' discretion.

The following primary schools have been sponsored by Murphy Environmental in relation to the promotion of environmental issues:

1. White Cross N.S., Julianstown, County Meath
2. Laytown N.S., Laytown, County Meath
3. St. Patrick's N.S., Stamullen, County Meath
4. Balscadden N.S., Balscadden, County Dublin
5. Realt na Mara N.S., Donacarney, Mornington, Co. Meath
6. Saints Peter & Paul N.S., Chapel Street, Balbriggan, County Dublin
7. St. George's Church of Ireland N.S., Hampton Street, Balbriggan, County Dublin
8. Hedgestown N.S., Hedgestown, Lusk, County Dublin
9. Naul N.S., Naul, County Dublin
10. St. Oliver Plunkett N.S., Balrothery N.S., Balrothery, County Dublin
11. St. Mologa's N.S., Bremore, Balbriggan, Co. Dublin
12. St. Teresa's N.S., Pinewood, Balbriggan, County Dublin
13. Balbriggan Educate Together N.S., Hamlet Lane, Balbriggan, Co. Dublin

Many of our sponsor schools are new 'Green Flag' holders, a demonstration of their hard work and commitment to sustainability projects.

Green-Schools

Corporate Policies

Our Environmental and Health & Safety Policies (reproduced overleaf) were written to document the company's overarching policy commitments in these two key areas. The policy statements are fully backed up by the resources required to fulfil our goals.

With the establishment of Murphy Environmental Hollywood Ltd. in 2008, our company policies, and indeed our entire Environmental Management Systems, were made site-specific, with a view to the separate and distinct aspects of our Hollywood and Gormanston operations.

The policies have been translated into Russian and Polish to accommodate drivers from the prominent nationalities entering Murphy Environmental sites. They were distributed to drivers, and are available to download from our website.

Murphy Environmental Hollywood Ltd

Environmental Policy Statement

W0129-02 Hollywood Scope

The Management of the disposal of mildly contaminated inert waste materials into engineered lined cells in a monitored environment in the full restoration of a limestone and shale quarry.

Our business

Murphy Environmental is the waste management division of Murphy Concrete Manufacturing Ltd., based in Balbriggan, Co. Dublin. Murphy Environmental operates waste management facilities in Hollywood, Co. Dublin and Gormanston, Co. Meath with a combined maximum intake for landfill and waste recovery of over one million tonnes per annum. These facilities operate under the terms of Waste Licences from the Environmental Protection Agency (EPA). **Our sites set new standards for engineered restoration in Ireland, and we are developing a major centre for recovery and recycling of Construction & Demolition-type waste.**

Our core principles

Our overall objectives are to enhance the environment at our sites by implementing programmes of controlled restoration, and to research, develop and facilitate waste management and recovery options for the construction and related sectors. Murphy Environmental is conscious that waste-related activities have the potential to impact on the environment. We are fully committed and obliged under our EPA licences to manage and operate our facilities to the highest possible standards thus ensuring that our activities do not cause environmental pollution.

Our staff and customers

Murphy Environmental facilities are managed by experienced and trained teams, who receive every support from management to fulfil their responsibilities towards environmental management. We are committed to achieving a safe working environment, where our staff are valued and respected. We will work to meet the demands of our customers wherever possible, without compromising company policy or stated environmental objectives and legal requirements.

Management of the environment

We have established Environmental Management Systems for our facilities.
We commit to:

- ☑ Satisfying and exceeding all legal requirements for waste management and other relevant legislation
- ☑ Managing our environmental impacts and improving our performance by setting and reviewing environmental objectives and targets
- ☑ Avoiding nuisance to neighbours by managing traffic, noise, dust and mud
- ☑ Carrying out regular environmental monitoring and publishing results on our website
- ☑ Reporting publicly on the operation and management of the facility
- ☑ Certifying our Environmental Management Systems to ISO14001:2004

This policy will be displayed in our Site Offices, made available to all employees and interested parties and published on ***www.murphyenvironmental.ie***

I.S. EN ISO 14001

Patricia Rooney
General Manager, Murphy Environmental

www.murphyenvironmental.ie | Hollywood Great, Nags Head, Naul, Co. Dublin (Tel 01 8433744) | Ver001 (Oct 08)

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Engaging with the Community

Murphy Environmental Hollywood Ltd

Health & Safety Policy Statement

In accordance with the Safety, **Health and Welfare at Work Act 2005** and in fulfilling its obligations to both employees and the public, Murphy Environmental Hollywood Ltd. produce the following safety statement in respect of health, safety and welfare:

It is the aim of **Murphy Environmental Hollywood Ltd.** to achieve a working environment, which is free of work-related accidents and ill health and to this end the company will pursue continuing improvements from year to year.

Murphy Environmental Hollywood Ltd. undertake to discharge their statutory duties by:

- **Identifying hazards in the workplace, assessing the risks related to them and implementing appropriate preventative and protective measures;**
- **Providing and maintaining modern work equipment; in compliance with BAT (Best Available Techniques)**
- **Establishing and enforcing safe methods of work;**
- **Recruiting and appointing personnel who have the skills, abilities and competence commensurate with their role and level of responsibility;**
- **Ensuring that tasks given to employees are within their skills, knowledge and ability to perform;**
- **Ensuring that technical competence is maintained through the provision of refresher training as appropriate;**
- **Promoting awareness of health and safety and of good practice through the effective communication of relevant information (see www.hsa.ie);**
- **Furnishing sufficient funds needed to meet these objectives;**
- **Being proactive in the production of satisfactory compliance documents for drivers, visitors, contractors & suppliers entering our facilities, under the terms of H & S legislation.**

This health and safety statement will be reviewed annually to monitor its effectiveness and to ensure that it reflects changing needs and circumstances

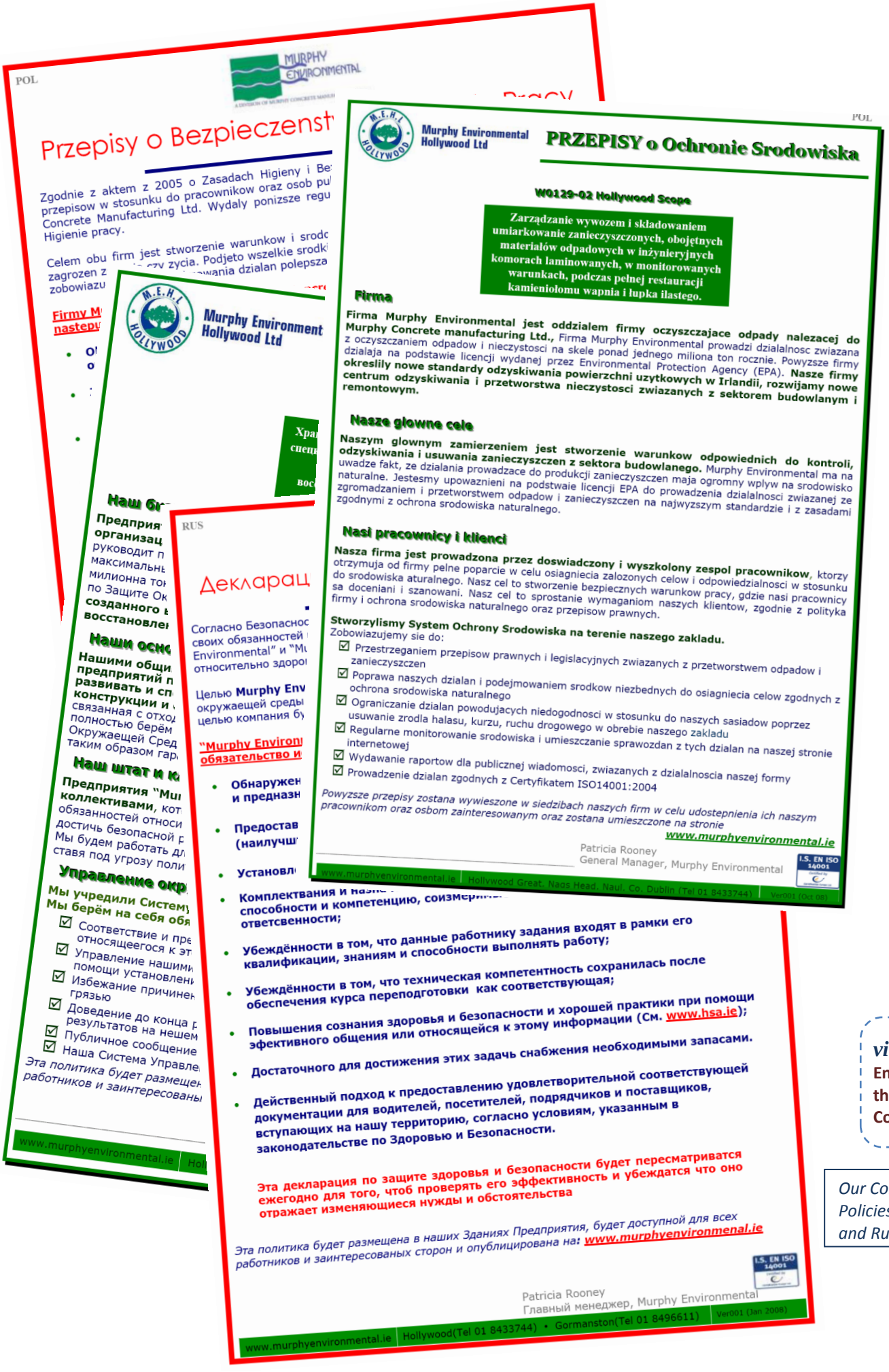
This policy will be displayed in our Site Offices, made available to all employees and interested parties and published on ***www.murphyenvironmental.ie***

I.S. EN ISO 14001

Patricia Rooney
General Manager, Murphy Environmental Hollywood Ltd

www.murphyenvironmental.ie | Hollywood Tel 01 8433744 | Ver001 (Oct 2008)

vii
Engaging with the Community


POL
Przepisy o Bezpieczenst
Zgodnie z aktem z 2005 o Zasadach Higieny i Be
przepisow w stosunku do pracownikow oraz osob pu
Concrete Manufacturing Ltd. Wydaly ponizsze regu
Higienie pracy.
Celem obu firm jest stworzenie warunkow i srodo
zagrozen z
zobowiazu
Firmy M
nastepu
Murphy Environment
Hollywood Ltd
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Соответствие и пре
относящегося к эт
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помощи установлен
Избежание причинен
грязью
Доведение до конца р
результатов на нешем
Публичное сообщение
Наша Система Управле
Эта политика будет размещен
работников и заинтересованы
www.murphyenvironmental.ie
RUS
Декларац
Согласно Безопаснос
своих обязанностей
Environmental" и "Mu
относительно здоров
Целью Murphy Env
окружающей среды
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"Murphy Environ
обязательство и
Обнаружен
и предназн
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Установл
Комплектования и наим
способности и компетенцию, соизмери
ответсвенности;
Убеждённости в том, что данные работнику задания входят в рамки его квалификации, знаниям и способности выполнять работу;
Убеждённости в том, что техническая компетентность сохранилась после обеспечения курса переподготовки как соответствующая;
Повышения сознания здоровья и безопасности и хорошей практики при помощи эфективного общения или относящейся к этому информации (См. www.hsa.ie);
Достаточного для достижения этих задачь снабжения необходимыми запасами.
Действенный подход к предоставлению удовлетворительной соответствующей документации для водителей, посетителей, подрядчиков и поставщиков, вступающих на нашу территорию, согласно условиям, указанным в законодательстве по Здоровью и Безопасности.
Эта декларация по защите здоровья и безопасности будет пересматриватся ежегодно для того, чтоб проверять его эффективность и убеждатся что оно отражает изменяющиеся нужды и обстоятельства
Эта политика будет размещена в наших Зданиях Предприятия, будет доступной для всех работников и заинтересованых сторон и опубликована на: www.murphyenvironmenal.ie
Patricia Rooney
Главный менеджер, Murphy Environmental
www.murphyenvironmental.ie | Hollywood(Tel 01 8433744) • Gormanston(Tel 01 8496611) | Ver001 (Jan 2008)
POL
Murphy Environmental
Hollywood Ltd
PRZEPISY o Ochronie Srodowiska
W0129-02 Hollywood Scope
Zarządzanie wywozem i składowaniem umiarkowanie zanieczyszczonych, obojętnych materiałów odpadowych w inżynieryjnych komorach laminowanych, w monitorowanych warunkach, podczas pełnej restauracji kamieniołomu wapnia i łupka ilastego.
Firma
Firma Murphy Environmental jest oddzialem firmy oczyszczajace odpady nalezacej do Murphy Concrete manufacturing Ltd., Firma Murphy Environmental prowadzi działalnosc zwiazana z oczyszczaniem odpadow i nieczystosci na skele ponad jednego miliona ton rocznie. Powyzsze firmy działaja na podstawie licencji wydanej przez Environmental Protection Agency (EPA). Nasze firmy okreslily nowe standardy odzyskiwania powierzchni uzytkowych w Irlandii, rozwijamy nowe centrum odzyskiwania i przetworstwa nieczystosci zwiazanych z sektorem budowlanym i remontowym.
Nasze glowne cele
Naszym glownym zamierzeniem jest stworzenie warunkow odpowiednich do kontroli, odzyskiwania i usuwania zanieczyszczen z sektora budowlanego. Murphy Environmental ma na uwadze fakt, ze działania prowadzace do produkcji zanieczyszczen maja ogromny wpływ na srodowisko naturalne. Jestesmy upoważnieni na podstwaie licencji EPA do prowadzenia działalnosci zwiazanej ze zgromadzaniem i przetworstwem odpadow i zanieczyszczen na najwyzszym standardzie i z zasadami zgodnymi z ochrona srodowiska naturalnego.
Nasi pracownicy i klienci
Nasza firma jest prowadzona przez doswiadczony i wyszkolony zespol pracownikow, ktorzy otrzymuja od firmy pełne poparcie w celu osiagniecia zalozonych celow i odpowiedzialnosci w stosunku do srodowiska aturalnego. Nasz cel to stworzenie bezpiecznych warunkow pracy, gdzie nasi pracownicy sa doceniani i szanowani. Nasz cel to sprostanie wymaganiom naszych klientow, zgodnie z polityka firmy i ochrona srodowiska naturalnego oraz przepisow prawnych.
Stworzylismy System Ochrony Srodowiska na terenie naszego zakladu.
Zobowiazujemy sie do:
Przestrzeganiem przepisow prawnych i legislacyjnych zwiazanych z przetworstwem odpadow i zanieczyszczen
Poprawa naszych działan i podejmowaniem srodkow niezbednych do osiagniecia celow zgodnych z ochrona srodowiska naturalnego
Ograniczanie działan powodujacych niedogodnosci w stosunku do naszych sasiadow poprzez usuwanie zrodla halasu, kurzu, ruchu drogowego w obrebie naszego zakladu
Regularne monitorowanie srodowiska i umieszczanie sprawozdan z tych działan na naszej stronie internetowej
Wydawanie raportow dla publicznej wiadomosci, zwiazanych z działalnoscia naszej formy
Prowadzenie działan zgodnych z Certyfikatem ISO14001:2004
Powyzsze przepisy zostana wywieszone w siedzibach naszych firm w celu udostepnienia ich naszym pracownikom oraz osbom zainteresowanym oraz zostana umieszczone na stronie www.murphyenvironmental.ie
Patricia Rooney
General Manager, Murphy Environmental
www.murphyenvironmental.ie | Hollywood Great, Nags Head, Naul, Co. Dublin (Tel 01 8433744) | Ver001 (Oct 08)
I.S. EN ISO 14001

Murphy Environmental Sponsors the 2008 Fireball World Championship, Thailand

During the 6th to the 21st March 2008, the Fireball World Championships took place at the Royal Varuma Yacht Club, Pattaya, Thailand. Seven Irish Fireball crews made the trip to Thailand to take part in the International Fireball World Championship.

Local man Seamus Moore from Balbriggan and team member Noel Butler who is a member of the Dun Laoghaire motor yacht club, finished 15th overall in the race and were the best of the Irish boats taking part.

Seamus Moore and Murphy Environmental were in contact throughout the race meet, in which Seamus outlined the highs and lows encountered during the five-day race meet. The highs include the 7th and 8th place finishes along with the consistent results achieved, and more importantly the achievement of coming 15th overall in the World Championships.

Introduction to the Fireball

The Fireball is a high performance, two-person sailing dinghy. The boat itself measures 4.93m with a beam of 1.4m and a weight of only 95kg. It is powered by an upwind area of 11.43 sq m and downwind the symmetric spinnaker adds a further 13.01 sq m. All this sail area is kept in check with a single trapeze for the crew. Needless to say that in a good blow the boat can certainly move and still be controllable thanks to its very adjustable rig. The Fireball is intended to sail best at an angle of about three degrees.

Moore/Butler 14894 (IRL)

Sporting beneficiaries

Murphy Environmental continued to support a range of local sports clubs through 2008.

North County Cricket has been supported by us and MCM this year through the sponsorship of the Fingal A and Fingal B Leagues; the club continues to flourish as one of the best Cricket Clubs in the country, proving to be a great source of provincial and national talent for the game.

GAA naturally has also been close to our hearts and minds when allocating sponsorship and we have supported a number of clubs locally, including a golf classic for St. Pat's in Stamullen, and a new set of jerseys for Cuchulainn Gaels G.A.A. club in County Louth.

Horse Racing at Bellewstown, Co. Meath
Meath are the proud custodians of the oldest racecourse in Ireland and our Managing Director, Seamus Murphy, is also one of the Racecourse Committee responsible for the management and upkeep of this very special track and its annual July meeting. Murphy Environmental sponsors a number of races, including the 'Mullaghacurry Cup', the feature race of the August meeting.

The Golf Club in Balrothery received sponsorship for the annual Balbriggan golf classic.

The Balbriggan Lions Club received sponsorship for their golf classic in May 2008.

Patricia Rooney Finalist for the O_2 Businesswoman of the Year Award 2008

The O_2 *Women Mean Business* Conference and Awards 2008, designed to recognise the outstanding achievements of Ireland's businesswomen, took place on Monday September 29th 2008 at Dublin's Shelbourne Hotel, St. Stephen's Green.

WMB
ASPIRING | INDIVIDUAL | VISIONARY | PASSIONATE

Among the finalists for the O_2 Businesswoman of the Year Award 2008 was the Murphy Environmental General Manager Patricia Rooney.

General Manager elected Drogheda & District Chamber President

Murphy Environmental General Manager, Patricia Rooney, was elected the Drogheda & District Chamber President during 2008.

Patricia is only the second woman ever to hold the title of President of the Chamber of Commerce.

Driving forward a new tourism vision for the town and encouraging new entrepreneurs are just some of the ambitions Patricia Rooney would like to see achieved by the organisation.

Patricia led the 'Drop the VAT Campaign' in November 2008, to assist the commercial and retail sectors of the county to stem the flow of income and sales north of the border.

Drogheda & District CHAMBER
IN BUSINESS FOR BUSINESS

viii PRTR

What is EU PRTR?

The European Pollutant Release and Transfer Register (E-PRTR) is an inventory of pollutant emissions from industry and other sources across Europe. The aim of the inventory is to make information more available to the public on pollutant emissions and waste transfers from a range of industrial sectors. Reporting under PRTR is an annual process.

Scope of the E-PRTR

The E-PRTR has an expanded list of chemicals to be reported on an annual reporting frequency. The E-PRTR applies to industrial facilities falling within 9 activity sectors:

1. Energy;
2. Production and processing of metals;
3. Mineral industry;
4. Chemical industry;
5. Waste and wastewater management;
6. Paper and wood production and processing;
7. Intensive livestock production and aquaculture;
8. Animal and vegetable products from the food and beverage sector; and
9. Other activities.

EPA Requirements

2009 is the second year in which Murphy Environmental Hollywood Ltd. and other licensed facilities have completed an electronic report of emissions data and waste transfers via the EPA website. There is also a requirement to include a printed copy of the PRTR return in the AER (please find attached).

Features of E-PRTR

The main features of the E-PRTR are as follows:

- 91 specified pollutants are required to be reported upon if they are released to air, water or land, either as permitted emissions or as accidental releases, or transferred to off-site Waste Water Treatment Plants (WWTPs).
- Types of emissions to be reported include deliberate, accidental, routine and non-routine releases.
- The transfer of hazardous and non-hazardous wastes must also be reported under the new Regulation.
- E-PRTR returns must be made by EPA to the EU, and consequently returns from operators must be made to EPA, on an annual basis.
- Facilities are required to ensure an appropriate quality of the data they report to their Competent Authority.
- The data they provide must be complete, consistent and credible; this requires that they use, to the extent possible, internationally approved data recording and collection methodologies, or other methods shown to be equivalent.

(Source: EPA)

viii
PRTR

| PRTR# : W0129 | Facility Name : Murphy Environmental Hollywood Limited | Filename : W0129_2008.xlsx | Return Year : 2008 |

AER Returns Worksheet

Version 1.1.04

REFERENCE YEAR	2008

1. FACILITY IDENTIFICATION

Parent Company Name	Murphy Concrete Manufacturing Ltd.
Facility Name	Murphy Environmental Hollywood Limited
PRTR Identification Number	W0129
Licence Number	W0129-02

Waste or IPPC Classes of Activity

No.	class_name
3.5	Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.
3.1	Deposit on, in or under land (including landfill).
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

Address 1	Hollywood Great
Address 2	Nags Head
Address 3	The Naul
Address 4	County Dublin
Country	Ireland
Coordinates of Location	573796.000
River Basin District	IEEA
NACE Code	382
Main Economic Activity	Waste treatment and disposal
AER Returns Contact Name	Ken Rooney
AER Returns Contact Email Address	ken_rooney@murphyenvironmental.ie
AER Returns Contact Position	Facility Manager
AER Returns Contact Telephone Number	01-8433744
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	01-8433747
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5d	Landfills
5c	Installations for the disposal of non-hazardous waste

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Murphy Environmental Hollywood Limited

Please enter summary data on the quantities of methane flared and / or utilised

	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this on

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

4.3 RELEASES TO WASTEWATER OR SEWER

| PRTR# : W0129 | Facility Name : Murphy Environmental Hollywood Limited | Filename : W0129_20 12/05/2009 16:32

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

| PRTR# : W0129 | Facility Name : Murphy Environmental Hollywood Limited | Filename : W0129_2008.xlsx | Return Year : 2008 | 12/05/2009 16:32

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTR# : W0129 | Facility Name : Murphy Environmental Hollywood Limited | Filename : W0129_2008.xlsx | Return Year : 2008 | 12/05/2009 16:32

Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	17 05 04	No	220027.56	Soil & Stones	D5	M	Weighed	Onsite in Ireland	Murphy Environmental Hollywood Ltd. W0129-02	Hollywood Great, Nags Head, The Naul, Co. Dublin		
Within the Country	10 01 01	No	687.92	Bottom Ash 7 Boiler Ash	D5	M	Weighed	Onsite in Ireland	Murphy Environmental Hollywood Ltd. W0129-02	Hollywood Great, Nags Head, The Naul, Co. Dublin		
Within the Country	17 01 01	No	78.32	Concrete	D5	M	Weighed	Onsite in Ireland	Murphy Environmental Hollywood Ltd. W0129-02	Hollywood Great, Nags Head, The Naul, Co. Dublin		
Within the Country	17 02 02	No	863.52	Glass	D5	M	Weighed	Onsite in Ireland	Murphy Environmental Hollywood Ltd. W0129-02	Hollywood Great, Nags Head, The Naul, Co. Dublin		
Within the Country	19 09 02	No	4251.14	Sludges from Water Clarification	D5	M	Weighed	Onsite in Ireland	Murphy Environmental Hollywood Ltd. W0129-02	Hollywood Great, Nags Head, The Naul, Co. Dublin		
Within the Country	17 06 04	No	87.44	Insulation Materials	D5	M	Weighed	Onsite in Ireland	Murphy Environmental Hollywood Ltd. W0129-02	Hollywood Great, Nags Head, The Naul, Co. Dublin		

* Select a row by double-clicking the Description of Waste then click the delete button

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MURPHY ENVIRONMENTAL
HOLLYWOOD LTD

For further information, please contact:

Ken Rooney, Facility Manager
Kathyrn Moonan, Assistant Facility Manager
Patricia Rooney, General Manager

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